

MISCELLANEOUS NOTES

1. PRELIMINARY INVESTIGATIONS CONFIRMING THE OCCURRENCE OF INDUS RIVER DOLPHIN *PLATANISTA GANGETICA MINOR* IN RIVER BEAS, PUNJAB, INDIA¹SANDEEP K. BEHERA^{2,4}, ASGHAR NAWAB^{2,5} AND BASANTA RAJKUMAR³¹Accepted January, 2008²Freshwater & Wetlands Programme, World Wide Fund for Nature-India (Secretariat), 172-B Lodi Estate, New Delhi 110 003, India.³Divisional Forest Officer, Ferozepur 152 001, Punjab, India. Email: basantark@gmail.com⁴Email: sbehera@wwfindia.net⁵Email: anawab@wwfindia.net

The Indus River Dolphin *Platanista gangetica minor*, or 'Bhulan' as it is locally called, was considered endemic to Pakistan as it was reported only in the Indus river system. More than a hundred years ago, the Bhulan occurred in the Indus and its four major tributaries, the Chenab, Ravi, Sutlej and Jhelum, where it was distributed from the foothills of the Karakoram range to the Indus Delta (Anderson 1878; Roberts 1998). It is currently found in only a small portion of its former range, a stretch approximately 600 km long. Small scattered populations consisting of 2-3 individuals are found, isolated between irrigation barrages. These subpopulations are not ecologically and genetically viable (Reeves *et al.* 1991; Reeves and Chaudhry 1998). The Indus Dolphin has been classified as 'Endangered' (IUCN 2006) (Criteria: A2abcde; B1ab(i,ii,iii,iv); C1) (Population Trend: Decreasing).

On the request of the State Forest Department of Punjab, the World Wide Fund for Nature - India conducted field surveys from December 20-22, 2007 to confirm the occurrence of the dolphins in the Harike Wetland Sanctuary. Surveys were conducted using a motor boat and the observations were recorded using binoculars and reading of locations was made using a GPS. Photographs and high definition videographs were also taken. A stretch of 60 km was intensively searched from Harike Lake Notch (31° 9.03' N; 74° 57.09' E) to Karmowala Village (31° 10.57' N; 075° 2.46' E), and back to the Harike Lake Notch, covering different channels. Informal interviews with locals were also conducted to ascertain the presence of the dolphins.

Failing to record any dolphin on the first day, we modified the survey methodology slightly on the second day by deputing four observers at different vantage points within the identified habitat of dolphins and instructed them to contact the team members in the motorboat as soon as they sighted dolphins. For the first half of day two, between 0930 and 1330 hrs the field survey was conducted in the downstream of the confluence of the rivers Beas and Sutlej, but no dolphin was sighted. It was then decided by the first

author (SKB) to visit the nearby upstream villages and conduct interviews with locals. We covered about 40-50 km along the banks of the River Beas, interviewing local villagers and at about 1700 hrs we reached the Karmowala village (Tarn Taran district), about 25 km upstream of the Sutlej-Beas confluence. We came across a local ferry service man who immediately took the team to the place where he had earlier seen the dolphins. When the team reached the site at 1730 hrs after walking along the banks for 2-3 km, a group of dolphins, which consisted of two adults and three calves, was sighted. On the third day of field visit, few more habitats suitable for dolphins were identified in the Beas river from the Harike lake, and 25 km upstream. Dolphins were sighted in two of these habitats (31° 13.37' N; 75° 3.79' E) and (31° 13.33' N; 75° 4.02' E).

Interviews with the fishermen and local community revealed the sightings of a small population of dolphins in the recent past, namely the last three months at the same locations where we sighted the dolphins. Elderly people from the village community and the fishermen informed us of the presence of dolphins in the Beas river stretch over the last few decades. The villagers also informed us about the presence of Gharials in 1980s and confirmed the presence of otters and turtles.

Although the dolphins we sighted in River Beas looked like the Indus River Dolphin we need further confirmation. It is assumed that this is a sub-population of the Indus River Dolphin, separated from the main population after the construction of barrages along the Indo-Pakistan border in the 1950s.

Gill Braulik informed "Earlier this year we (Pakistan Wetlands Programme/WWF-Pakistan) conducted interview surveys on all of the Indus tributaries in Punjab to establish the date of extirpation of dolphins in these rivers. There is evidence that the Indus dolphins existed upstream of Suleimanki Barrage on the Sutlej until 1989. Suleimanki is 140 km downstream of Harike. Given that the Sutlej in

Pakistan was recently inhabited by dolphins, it seems likely to me that the dolphins in India are a remnant, previously undiscovered subpopulation, rather than that they moved here recently from elsewhere. The closest Indus dolphins are approximately 600 km away in the Indus River". Looking at the present situation on the Sutlej and Beas rivers in India, it is quite impossible for the movement of the species as the barrage gate on the Indo-Pak border area is totally blocked with limited seepage water flowing into Pakistan. As per the information gathered from the locals, Beas is a free flowing river after the Pong dam and has a good depth and flow with less visible pollution. River Beas and its tributaries may have other dolphin populations that need to be identified through detailed surveys.

The River Sutlej was found to be visibly polluted (black coloured water) with a limited flow (shallow) and heavy growth of the Water Hyacinth *Eichornia crassipes*, and is therefore an unsuitable habitat for dolphins. The confluence with River Beas presents a contrasting picture. River Beas is comparatively less polluted (murky water) with a high flow

and presence of deep pools/counter eddy currents/shallow riffle areas/islands in lower stretches (from the confluence upstream 25 km) and forms a suitable habitat for dolphins. However, upstream of the Harike Lake, the habitat is subjected to disturbances such as agricultural activities, ferry services and fishing.

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2. LOCATIONS OF SIND SPARROW SIGHTINGS ALONG THE RAJASTHAN CANAL AND THE RIVER SUTLEJ¹

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In the Indian subcontinent, the Sind Sparrow *Passer pyrrhonotus* is virtually restricted to the floodplains of the River Indus delta and its major tributaries, the Sutlej and Ravi rivers, north to about 34° 6' N (Clement *et al.* 1999). Its Indian range is described as the Indian Punjab on the Beas river near Gurdaspur and along the Sutlej from Harike, east to the bridge on the main road between Ludhiana and Jullunder (Jalandhar), but not further upstream at Rupar (Summers-Smith 1988). It has recently colonised the Yamuna flood plain in eastern Haryana and north Delhi, but remains extremely scarce and local everywhere (Harvey and Sharma 2002).

This note concerns its recent occurrence in

Hanumangarh district of Rajasthan. We have been regularly visiting this area since the last fifteen years or so, but have never come across this species before.

On April 23, 2001 one male and two female Sind Sparrows were found on a Kikar *Acacia nilotica*, on the bund of the Rajasthan Canal (Indira Gandhi Nahar) near Kulchandar and Saharni villages (c. 22 km from Sangaria) in Hanumangarh district, Rajasthan. On both sides of the canal there is a variety of *Acacia* scrub, tamarisk and grass jungle broken by large Kikar and Tali *Dalbergia sissoo*. These native trees are also present along the bunds of the canal to stabilize the soil.